

Remarks/Arguments

As of the Office Action mailed January 26, 2006 claims 1-35 are pending in the application. Claims 1-25, 34 and 35 are withdrawn and claims 26-33 stand rejected. Reexamination and reconsideration are respectfully requested in light of the amendments and remarks/arguments herein.

Amendments to the Claims

Claim 26 has been amended to recite “providing a base material and a preheated binder and forming a mixture, wherein said mixture has a selected moisture level "x"; (b) introducing and further mixing said mixture in a screw conveyor wherein the temperature of the mixture in the screw conveyor is maintained at a temperature of at or below about 200° F and a shear rate at or below 10^4 (sec⁻¹) and said moisture level is reduced to “y” wherein $y < x$.” Support for this amendment may be found in paragraph [0021] of the published application which recites:

“The screw conveyor, which may be an auger type conveyor, therefore serves to further mix the binder and base components and when heated, as applied to a mixture containing liquid, operates to increase the composition to an overall higher solids level, or stated another way, to a lower moisture level, in connection with those mixtures that contain moisture.”

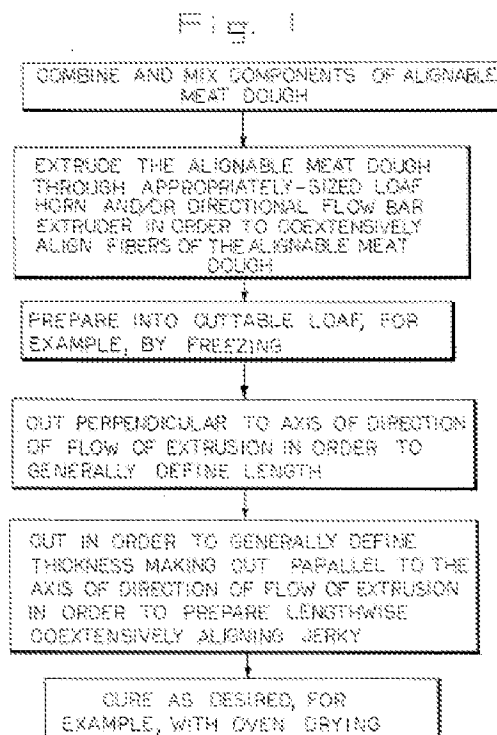
Applicants also note that the amendments made above, should clarify the claim language rendering the 35 USC §112 rejection moot. More specifically, the Examiner rejected the language “mixing said mixture” for lack of clarity and “the composition” for lack of antecedent basis. Accordingly, “mixing said mixture” has been amended to recite “further mixing said mixture” and “the composition” has been amended to recite “said mixture.” No new matter is believed to have been entered by these amendments.

Rejections Under 35 USC §102/103

Claims 26-33 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Scaglione et al, U.S. Patent No. 4,868,002 in view of Karwowski et al, U.S. Patent No. 5,731,029 and Roth, U.S. Patent No. 4,239,785.

As an initial note, claim 26 as amended requires providing a base material and a preheated binder and forming a mixture, wherein the mixture has a selected moisture level "x"; introducing and further mixing the mixture in a screw conveyor wherein the temperature of the mixture in the screw conveyor is maintained at a temperature of at or below about 200° F and a shear rate at or below 10^4 (sec⁻¹) and the moisture level is reduced to "y" wherein $y < x$. While the cited references teach that the moisture levels of the doughs may be reduced in a drying step, generally performed after cutting, they do **not** teach or suggest, alone or in combination, the reduction of the moisture level of the mixture while further mixing the mixture in a screw conveyor.

Turning to the cited reference, Scaglione et al disclose a method and/or process for preparing a fiber containing good having at least one component such as processed animal tissue. Col. 1, lines 9-15. The process is generally described in **Figure 1**, reproduced below.



As can be seen from the above and described in more detail in Col. 11, line 5- Col. 12, line 8, the components of the meat dough are combined and mixed. Then the meat dough may be extruded, prepared into a cuttable loaf and cut. In addition, the meat dough may be cured.

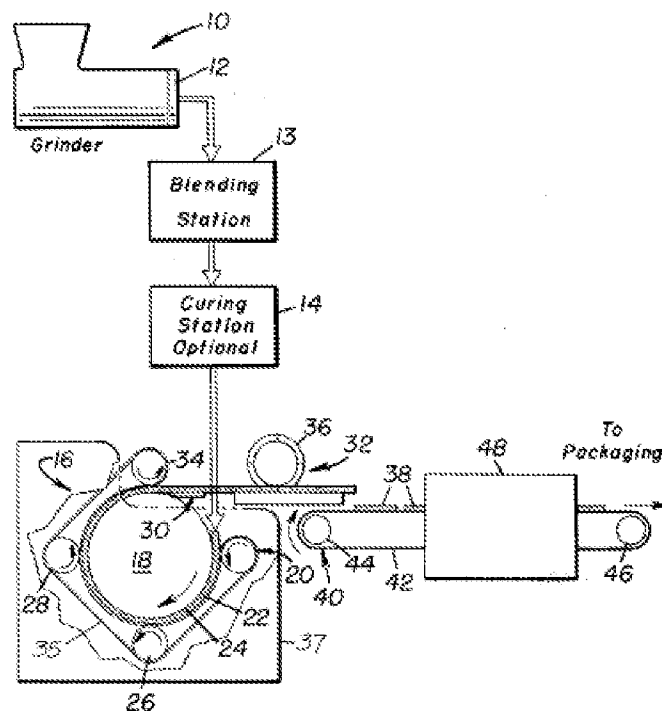
Scaglione et al discuss reducing the moisture content of the product, this description is reproduced below:

“Subsequent to cutting, the cut portions are preferably dried to obtain final product...Drying, in general, is carried out until the final product has the desired level of moisture retained therein. Initially, for example, the meat dough can have from about 65 to 70 percent water therein and drying is carried out to remove at least some of this. Desirably, the drying is carried out until the lengthwise or otherwise coextensively aligning jerky has at most about thirty-five percent by weight water or the like content. The drying, for instance, can be carried out until at most about twenty-five percent by weight water remains in the final product. Preferably, the drying is carried out until the water content is from about 15 to about 20 percent or so, including, for example, about 16 to 17 percent.”

Col. 9 line 48- Col. 10, line 22.

However, Scaglione et al fail to teach or suggest a reduction of the moisture level of the meat dough during a step where the mixture is further mixed in a screw conveyor. Reducing moisture from the dough is taught in relation with the step of drying, wherein drying occurs after the product has been cut. Accordingly, Scaglione does not teach or suggest the reduction of the moisture level of the mixture while further mixing the mixture in a screw conveyor and at the indicated temperature and shear rate.

Roth fails to make up for the deficiencies of Scaglione. As discussed in the response of December 5, 2005, Roth is directed to a method and apparatus for making jerky in a “continuous operation including a freezer drum upon which the jerky is simultaneously formed to a desired thickness and chilled or frozen within a short period of time.” Col. 1, lines 4-10. The sole figure in the ‘785 patent is reproduced below for your convenience.



As can be seen from the above, the method described by Roth includes a grinder indicated at **10** which preferably includes a screw impeller. Col. 3, lines 44-47. Roth, however, fails to teach or suggest that the moisture level of the meat dough is reduced in the grinding stage. Roth merely teaches that

“the method of making jerky includes the initial step of grinding or otherwise dividing the basic materials for the jerky to form particles of uniform or varied coarseness selected to provide a desired consistency in the final product...the basic materials for the jerky are formed from meats, particularly beef, but may include other meats or even vegetable extenders.”

Col. 3, lines 37-47.

Therefore, even if one were to liken the grinder to a screw conveyor, it is not disclosed that while dividing the basic material in the screw conveyor the moisture level of the basic materials is reduced.

The only discussion of reducing moisture from the jerky occurs with respect to drying the jerky in the drying chamber **48** after cutting the jerky within the cutting station **32**. Specifically, Roth recites that:

“The conveyor **40** carries the individual jerky strips through a drying chamber **48**... Initially, the drying tunnel **48** provides means (not shown) such as a source of hot air or source of heat for thawing out the jerky strips **38**. Thereafter, the drying chamber **48** serves to continue heating the jerky strips **38** in order to remove moisture therefrom and condition the jerky strips for storage at room temperature.”

Col. 5, lines 38-61.

Accordingly, Roth also fails to teach or suggest a reduction in the moisture of the mixture during further mixing in the screw conveyor. In addition, Karwowski et al fail to make up for the deficiencies of Roth and Scaglione et al.

Karwowski et al is directed to “the production of meat based products using a rotary molder.” Col. 1, lines 4-5. Karwowski et al disclose that the initial moisture content of the meat

“is at least about 50% by weight, more generally about 65% by weight to about 75% by weight.”

Col. 2, lines 20-23. The moisture content of the doughs during rotary molding is disclosed to be “at least about 30% by weight, preferably from about 35% by weight to about 50% by weight, based upon the weight of the dough.” Col. 2, lines 62-65, See also Col. 7, line 65-Col. 8, line 13.

Karwowski et al also recite that the moisture content of the final product

“may be less than or equal to about 30% by weight, preferably less than about 20% by weight, based upon the weight of the final meat-based product. Exemplary final moisture contents may range from about 13% by weight to about 30% by weight, generally from about 15% by weight to about 25% by weight.”

Col. 3, lines 26-33.

Therefore, while Karwowski et al disclose that the final product and the dough may contain less moisture than the meat, it does not disclose a reduction in the moisture level of the mixture while further mixing the mixture in a screw conveyor. For example, with respect to the reducing the moisture content of the dough, Karwowski et al state that the “moisture content of the pieces **85** may be reduced to a shelf stable level using at least one oven, or at least one dryer, or preferably both an oven and dryer.” Col. 13, lines 45-47, see also Col. 3, lines 33-39.

In addition, Karwowski et al disclose that moisture level of the meat may be reduced during a cooking process for the meat reciting that “from about 3% by weight to about 15% by weight of the water inherent in the meat may be removed during vacuum cooking so as to reduce subsequent baking and/or drying times.” Col. 10, lines 50-54. The cooking device is described as a “steam jacketed kettle **20** equipped with a mixer **22**.” Col. 10, lines 15-20. Applicants, however, would like to point out that the moisture is not reduced while mixing in a screw conveyor. Furthermore, even if one were to somehow liken the disclosed mixing elements

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to a screw conveyor, the moisture is being removed from the meat and NOT the dough or mixture.

In conclusion, Scaglione, Roth and Kawowski all disclose the reduction of moisture during a drying step which typically occurs after the cutting step. Kawowski additionally discloses the removal of moisture from the meat (and NOT the dough) during a cooking step. The cited references, however, fail to teach or suggest alone or in combination reducing the moisture levels of the mixture during a further mixing step in a screw conveyor.

In light of the above, Applicants respectfully submit that claim 26 -33 are not taught or suggested by the cited references. In consideration of the foregoing Applicants respectfully requests that the rejections of claims 26-33 are withdrawn upon reconsideration.

Having overcome all of the outstanding rejections, it is respectfully submitted that the application is now in condition for allowance. Early and favorable action is respectfully solicited.

In the event that there are any fee deficiencies, or additional fees are payable, please charge, or credit any overpayment to, our Deposit Account No. 50-2121.

Respectfully submitted,

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